WO 99/07751 PCT/GB98/02264 34 We claim: CLAIMS 2 A polymer comprising a/side chain of formula I: 1. 3 5 6 (I) 8 wherein group R is an alkyl, aryl, oxyalkyl or oxyaryl linker group. 10 11 A polymer as claimed in Claim 1 having a baokbone 2. comprising an ethylene grouping which is attached 13 to the side chain. 14 15 A polymer as claimed in either one of Claims 1 and 3. 16 2 wherein group R is a C₁₋₁₀ alkyl or oxyalkyl 17 group. 18 19 A polymer as claimed in Claim/3 wherein group R is 4. 20 a C1-6 alkyl group. 21 22 A polymer as claimed in Claim 4 wherein said side 5. 23 chain is of formula IX: 24 25 26 27 ΙI 28 29 wherein ~CH/CH~ is part of the backbone of the 30 31

polymer.

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A polymer as claimed in either one of Claims 1 and 6. 2 wherein said side chain is of formula III:

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6 7

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Sub 1

A 1

A 2

A 3

III

Wherein _CH2- CH_ is part of the backbone of

wherein $_{\sim}CH_{2}-$ CH $_{\sim}$ is part of the backbone of the polymer.

- 8 7. A polymer as claimed in any one of Claims 1 to 6
 9 in the form of a resin suitable as a support for
 10 solid phase chemical reactions.
- 12 8. A method of producing a polymer as claimed in any
 13 one of Claim 1 to 6 wherein a Merrifield resin is
 14 reacted to replace the chlorine atom thereof with
 15 a sulphur containing group which is subsequently
 16 oxidised to yield a vinyl sulphone moiety of
 17 formula I.
 - 9. A method of producing a solid-phase reactant for a solid-phase chemical reaction, said reactant comprising a complex of a substrate moiety and a resin comprising a polymer as claimed in any one of Claims 1 to 7, wherein said complex is produced by reacting a precursor substrate with a functional group on the resin.
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 27 10. A method of chemical synthesis involving a
 28 chemical reaction wherein one of the substrates of
 29 said reaction is in the form of a solid-phase
 30 complex with a resin comprising a polymer as
 31 claimed in any one of Claims 1 to 7.
- 33 11. A microreactor comprising a resin material as a 34 support matrix for a solid-phase chemical 35 reaction, wherein said resin material comprises a 36 polymer as claimed in any one of Claims 1 to 7.